DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. 237TVP01 Issue Date: November 28, 2003
Application No. 237 Expiration Date: December 31, 2008

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **United States Army Garrison, Alaska (USAG-AK)**, for the operation of the **Fort Richardson**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

All facility-specific terms and conditions of Air Quality Control Permit-to-Operate No. 9421-AA006 and Air Quality Control Construction Permit No 237CP03 have been incorporated into this Operating Permit.

This Operating Permit becomes effective January 1, 2004.

John F. Kuterbach, Manager

Air Permits Program

Table of Contents

List of Abbreviations Used in this Permit....2
Section 1. Identification....2
Section 2. General Emission Information....2
Section 3. Source Inventory and Description....2
Section 4. Emission Fees....2
Section 5. Source-Specific Requirements....2
Fuel-Burning Equipment....2
For fuel oil, Source ID(s) EU01(when firing liquid fuel), EU02 through EU06 and EU13 through EU20:....2
For fuel gas, Source ID(s) EU01 and EU21 through EU23:....2
Fuel Consumption Limits....2
Fuel Sulfur Content Limits....2
Owner Requested Limits....2
Sources Subject to Federal New Source Performance Standards (NSPS) 40 CFR 60 Subpart A2
Volatile Organic Liquid Storage Vessels (Tanks) Subject to NSPS 40 CFR 60 Subpart Kb....2
Sources Subject to Municipal Solid Waste Landfill Requirements, Source ID EU09....2
Sources Subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart A....2
Sources Subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart M (National Emission Standards for Asbestos)....2
Sources Subject to the National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63, Subpart A....2
Section 6. Visible Emissions and PM Monitoring, Recordkeeping and Reporting....2
Section 7. Facility-Wide Requirements....2
Protection of Stratospheric Ozone, 40 CFR 82 Subpart E - Source ID EU12....2
Section 8. Insignificant Sources....2
Section 9. Compliance Plan....2
Section 10. Generally Applicable Requirements....2
Section 11. General Source Testing and Monitoring Requirements....2
Section 12. General Recordkeeping, Reporting, and Compliance Certification Requirements....2
Section 13. Standard Conditions Not Otherwise Included in the Permit....2
Section 14. Permit As Shield from Inapplicable Requirements....2
Section 15. Visible Emissions Forms....2
Visible Emissions Field Data Sheet....2
Visible Emissions Observation Record....2
Section 16. SO_2 Material Balance Calculation....2
Section 17. ADEC Source Test Plan Form....2
ADEC Source/Performance Test Plan Summary Form....2
Section 18. ADEC Notification Form....2

List of Abbreviations Used in this Permit

AAC .....Alaska Administrative Code
ADEC.....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT.....Best Available Control Technology
BHp.....Boiler Horsepower
C.F.R. .....Code of Federal Regulations
CO.....Carbon Monoxide
dscf.....Dry standard cubic foot
EPA.....US Environmental Protection Agency
gr./dscf .....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs or HACs.....Hazardous Air Pollutants or Hazardous Air Contaminants [*HAPs* or *HACs* as defined in AS 46.14.990(14)]
ID .....Source Identification Number
kPa.....kiloPascals
LAER .....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology as defined in 40 C.F.R. 63.
MR&R.....Monitoring, Recordkeeping, and Reporting
MVAC's.....Motor Vehicle Air Conditioners
NESHAPs .....Federal National Emission Standards for Hazardous Air Pollutants [*NESHAPS* as contained in 40 C.F.R. 61 and 63]
NO_X.....Nitrogen Oxides
NSPS.....Federal New Source Performance Standards [*NSPS* as contained in 40 C.F.R. 60]
O & M.....Operation and Maintenance
O_2 .....Oxygen
PM-10 .....Particulate Matter less than or equal to a nominal ten microns in diameter
ppm .....Parts per million
ppmv, ppmvd .....Parts per million by volume on a dry basis
psia.....Pounds per Square Inch (absolute)
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH.....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [*VOC* as defined in 18 AAC 50.990(103)]
VOL .....volatile organic liquid [*VOL* as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol%.....volume percent
wt% .....weight percent

Section 1. Identification

Names and Addresses

Permittee:
United States Army Garrison, Alaska (USAG-AK)
730 Quartermaster Road, #6500
Fort Richardson, Alaska 99505-6500

Facility Name:
Fort Richardson

Location:
61˚ 16’ 43” N 149˚ 41’ 47” W

Physical Address:
730 Quartermaster Road
Fort Richardson, Alaska 99505

Owner:
United States Army Garrison, Alaska (USAG-AK)
Commander, U.S. Army Garrison, Alaska (APVR-GC)
(COL Donna G. Boltz)
600 Richardson Drive, #6000
Fort Richardson, Alaska 99505-6000
Telephone Number (907) 384-2175

Operator:
United States Army Garrison, Alaska (USAG-AK)
Director of Public Works, APVR-RPW
Tom Berg, Post Engineer
730 Quartermaster Road, #6500
Fort Richardson, Alaska 99505-6500
Telephone Number (907) 384-6925

Permittee’s Responsible Official
Tom Berg, Post Engineer

Designated Agent:
United States Army Garrison, Alaska (USAG-AK)
Director of Public Works
Chief, Environmental Compliance, Kate Siftar
1060 Gaffney Road, #6500
Fort Wainwright, Alaska 99703-6500
Telephone Number (907) 353-6249

Facility and Building Contact:
Kate Siftar, Chief, Environmental Compliance
Telephone Number (907) 353-6249
kate.siftar@wainwright.army.mil

Fee Contact:
United States Army Garrison, Alaska (USAG-AK)
Director of Public Works, APVR-WPW-GEC
Chief, Environmental Compliance, Kate Siftar
1060 Gaffney Road, #6500
Fort Wainwright, Alaska 99703-6500
Telephone Number (907) 353-6249

SIC Code of the Facility: 9711 - National Security

[18 AAC 50.350(b)(1), 1/18/97]

Section 2. General Emission Information

[18 AAC 50.350(b)(1), 1/18/97]

Emissions of Regulated Air Contaminants:

NO_x, SO_2, CO, VOCS, and PM_{10}

Facility Classifications:

(1) 18 AAC 50.300(b)(2) [containing a fuel-burning equipment with a rated capacity of ≥100MMBtu/hr]

(2) 18 AAC 50.300(c)(1) [PSD Major Facility emits or has the PTE ≥ 250 TPY of a regulated air contaminant in an attainment or unclassifiable area for that contaminant per 18 AAC 50.015]

Operating Permit Classifications:

(1) 18 AAC 50.325(b)(1) [≥ 100TPY of a regulated air contaminant]

(2) 18 AAC 50.325(b)(3) [source subject to NSPS/NESHAPs standards (40 CFR 60,61 & 63)]

(3) 18 AAC 50.325(c) [facility described in 18AAC50.300(b)-(e) within AS 46.14.130(b)(4)]

[18 AAC 50.350(d)(2), 1/18/97]

Section 3. Source Inventory and Description

[18 AAC 50.350(d)(2), 1/18/97]

Sources listed in Table 1 have specific monitoring, recordkeeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 - Source Inventory

ID	Source Name	Source Description	Rating/size	Installation Date
EU01	4 – Dual-Fired Boilers	Central Heat and Power Plant Boilers, Building 36012, Primary fuel is Natural Gas, with DFA as Backup fuel	187 MMBtu/Hr (each)	1952
EU02	Emergency Backup Power Plant Generator	Diesel Generator, Building 772	300 kW	1948
EU03	Emergency Backup Power Plant Generator	Diesel Generator, Building 772	300 kW	1948
EU04	Emergency Backup Power Plant Generator	Diesel Generator, Building 772	1100 kW	1948
EU05	Emergency Backup Power Plant Generator	Diesel Generator, Building 772	2500 kW	1951
EU06	Emergency Backup Power Plant Generator	Diesel Generator, Building 772	2500 kW	1951
EU07	2 - Dry Cleaning Units	Dry Cleaning Plant, Dry-to-Dry Machines, Building 726	75/lbs/load (each)	1994
EU08	DFA Storage Tank	Underground Storage Tank, Building 772	20,000 gallons	1995
EU09	Landfill	Closed Municipal Solid Waste Landfill Cells, Facility-wide	38,002 yd3/yr	1940→1978
EU10	Fugitive Dust	Paved/Unpaved Roads, Facility-wide	N/A	N/A
EU11	Open Burning	Misc. Burning (firefighter training, construction, prescribed, etc.)	N/A	N/A
EU12	Ozone Depleting Substance Use	Misc. Refrigeration Equipment, Facility-wide	Various	N/A
Sources Limited By Federally Enforceable Operating Limits				
EU13	Emergency Backup Generator 250 hour limit	Diesel Generator, Water Treatment Plant, Building 28008	75kW	1990
EU14	Emergency Backup Generator 250 hour limit	Diesel Generator, Number 2 Chlorinator, Building 28004	60 kW	1980
EU15	Emergency Backup Generator 250 hour limit	Diesel Generator, Fire Station, Building 654	54 kW	1999
EU16	Emergency Backup Generator 250 hour limit	Diesel Generator, 59th Signal Battalion, Building 652	150 kW	1986
EU17	Emergency Backup Generator 250 hour limit	Diesel Generator, 59th Signal Battalion, Building 652	400 kW	1990
EU18	Emergency Backup Generator 250 hour limit	Diesel Generator, 59th Signal Battalion, Building 969-B	55 kW	1990
EU19	Emergency Backup Generator 250 hour limit	Diesel Generator, 59th Signal Battalion, Building 57026-B	40 kW	1994
EU20	Emergency Backup Generator 250 hour limit	Diesel Generator, MP Station, Building 656	35 kW	1999

ID	Source Name	Source Description	Rating/size	Installation Date
Sources authorized and carried over from Construction Permit No. 237CP03				
EU21	Cleaver Brooks	4 Boilers[1]	32.7 MMBtu/hr[2]	2002 +
EU22	Burnham	302 Boilers	362.9 MMBtu/hr[2]	2002 +
EU23	Domestic Water Heaters	208 Water Heaters	41.1 MMBtu/hr	2002 +

Table Notes:

1. Not all buildings will be equipped with boilers. A small number of buildings will have either gas-fired hot air furnaces or gas-fired infrared systems installed.
2. The Rating/Size column includes the heat input from these devices. All sources will combust natural gas.

Section 4. Emission Fees

1. Assessable Emissions. The Permittee shall pay to the Department an annual emission fee based on the facility's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air contaminant that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

1.1 the facility's assessable potential to emit of 414.1 TPY; or

1.2 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the Department**.**

[18 AAC 50.346(a)(1), 5/03/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

2. Assessable Emission Estimates. Emission fees will be assessed as follows:

2.1 no later than March 31 of each year, the Permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795**;** the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

2.2 if no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 1.1.

[18 AAC 50.346(a)(1), 5/03/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

Section 5. Source-Specific Requirements

Fuel-Burning Equipment

3. Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) EU01 through EU06 and EU13 through EU23 listed in Table 1 to reduce visibility through the exhaust effluent by any of the following:

a. more than 20 percent for a total of more than three minutes in any one hour[1];

[18 AAC 50.055(a)(1), 1/18/97 and 18 AAC 50.350(d)(1)(C), 6/21/98]
[40 C.F.R. 52.70, 7/01/01]

b. more than 20 percent averaged over any six consecutive minutes[2].

[18 AAC 50.055(a)(1) & 50.346(c), 5/03/02 and 18 AAC 50.350(d)(1)(C), 6/21/98]

3.1 For Source ID(s) EU02 through EU06 and EU13 and through EU20 as long as they do not exceed the operating limits in Condition 11, then monitoring shall consist of an annual compliance certification under Condition 80 with the opacity standard. If an exceedence of the limits in Condition 11 occurs, then the Permittee shall monitor, record and report for the source exceeding the limits according to Section 6.

3.2 Within 10 days after the initial operation of Source ID(s) EU21, EU22, and EU23, conduct an observation of the exhaust for the presence or absence of visible emissions, excluding condensed water vapor. Record the following information in a written log for each observation:

a. The date and time of the observations;

b. The Source ID number;

c. Whether visible emissions are present or absent in the exhaust

d. If the source starts operation on the day of the observation, the startup time of the source; and

e. Name, title, and signature of the person making the observation.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

[1] For purposes of this permit, the "more than three minutes in any one hour" criterion in this Condition and Conditions 3.a and 52.1 will no longer be effective when the Air Quality Control (18 AAC 50) regulation package effective 5/03/02 is adopted by the U.S. EPA.

[2] The six-minute average standard is enforceable only by the state until 18 AAC 50.055(a)(1), dated May 3, 2002, is approved by EPA into the SIP at which time this standard becomes federally enforceable.

3.3 For Source ID(s) EU01 and after the initial visible emission observation for EU21 through EU23, firing fuel gas as primary fuel, monitoring for these sources shall consist of a certification in each Facility Operating Report required in Condition 79 that each of these sources fired only gas during the reporting period. If operating Source ID EU01 on a back-up liquid fuel, then the Permittee shall monitor, record and report according to Condition 33.

[18 AAC 50.350(g) - (i) & 50.346(c), 5/03/02]

4. Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from Source ID(s) EU01 through EU06 and EU13 through EU23, to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.346(c), 5/03/02; 18 AAC 50.055(b)(1), 1/18/97and 18 AAC 50.350(d)(1)(C), 6/21/98]

4.1 Monitor, record and report for Source ID(s) EU02 through EU06 and EU13 through EU20 according to Section 6.

4.2 For Source ID(s) EU01 and EU21 through EU23 firing fuel gas as primary fuel, monitoring for these sources shall consist of a certification in each Facility Operating Report required in Condition 79 that each of these sources fired only gas during the reporting period.

4.3 When firing Source ID EU01 on liquid fuel monitor according to Condition 33.

[18 AAC 50.346(c) & 50.350(g) – (i), 5/03/02]

5. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU01 through EU06 and EU13 through EU23 to exceed 500 ppm averaged over three hours.

[18 AAC 50.346(c), 5/03/02; 18 AAC 50.055(c), 1/18/97; and 18 AAC 50.350(d)(1)(C), 6/21/98]

For fuel oil[3], Source ID(s) EU01(when firing liquid fuel), EU02 through EU06 and EU13 through EU20:

5.1 The Permittee shall do one of the following for each shipment of fuel:

a. If the fuel grade requires a sulfur content less than 0.75 percent by weight, keep receipts that specify fuel grade and amount; or

b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and

(i) test the fuel for sulfur content; or

[3] *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.42b, effective 7/01/01.

(ii) obtain test results showing the sulfur content of the fuel from the supplier, refinery; or through facility contractor. The test results must include a statement signed by the supplier, refinery, or facility contractor, of what fuel they represent.

5.2 Fuel testing under Condition 5.1 must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the Department.

5.3 If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO_2 emissions in ppm using either Section 17 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

[18 AAC 50. 350(g) - (h), 5/03/02]

5.4 The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 5.3 exceed 500 ppm, the Permittee shall report under Condition 77. When reporting under this Condition, include the calculation under Section 17.

b. The Permittee shall include in the report required by Condition 79

(i) a list of the fuel grades received at the facility during the reporting period;

(ii) for any grade with a maximum fuel sulfur greater than 0.50 percent sulfur, the fuel sulfur of each shipment; and

(iii) for fuel with a sulfur content greater than 0. 75 percent, the calculated SO_2 emissions in ppm.

[18 AAC 50.346(c) & 350(g) - (i), 5/03/02]

For fuel gas, Source ID(s) EU01 and EU21 through EU23:

5.5 Compliance with this condition is assured by using a grade of fuel that limits Hydrogen sulfide (H_2S) content to less than 4,335 dry standard parts per million by volume.

5.6 For each month record the average and high natural gas H_2S concentration expressed in dry standard parts per million and grains per million standard cubic feet of gas for the fuel supplied to the facility. This requirement may be met by obtaining a statement or receipt from the fuel supplier showing the grade of the fuel for each shipment of fuel delivered to the facility or, if a certificate is not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using an approved ASTM method.

5.7 Report under Condition 77 whenever the natural gas-fired boilers/heaters receive fuel that does not meet the requirements of Condition 5.5.

5.8 Include in the report the monthly average and quarterly highest measured natural gas concentration of H_2S expressed as dry standard parts per million standard cubic feet, and any reports required by Condition 5.7.

5.9 Keep records of the sulfur contents of each monthly supply of fuel, and all test results, vendor statements, or receipts required under Conditions 5.6 or 5.8. Submit copies of the records with the report required by Condition 79.

18 AAC 50.346(c) & 350(g) - (i), 5/03/02]

Fuel Consumption Limits

6. The Permittee shall limit fuel consumption for Source ID(s) EU01, EU21, EU22, and EU23 as indicated in Table 2 below.

Table 2 – Fuel Consumption Limits

Source	Source Name	Natural Gas 12-month Limit (Mscf)	Diesel 12-month Limit (Gallons)
EU01	**CHPP Boilers**	1,099 Mscf	110,000
EU21	**Cleaver Brooks**	225 Mscf	N/A
EU22	**Burnham**	2,499 Mscf	N/A
EU23	**Domestic Water Heaters**	287 Mscf	N/A

6.1 For each dual-fired boiler in Source ID EU01:

a. Monitor and record the monthly natural gas and diesel fuel oil use.

b. Include with the Facility Operating Report required by Condition 79 the 12-month rolling natural gas use and the 12-month rolling diesel fuel use.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

6.2 For Source ID(s) EU21 through EU23:

a. Assign a unique identifier,

b. Mark each source with it's associated identifier,

c. Record the date and time of initial startup;

d. Monitor and record the monthly natural gas use for each category of emission units listed in condition 6. If fuel gas consumption records are missing or incomplete, monitor hours of operation of each of the emission units, calculate fuel consumption using design rating and fuel heating value. If operating records are missing or incomplete, use design rating, fuel heating value and assume continuous operation at design load.

e. Upon startup of Source ID(s) EU21, EU22, and EU23, provide in the next Facility Operating Report required by Condition 79 a list of each source's location, heat-input rating and unique identifier.

f. Include with the Facility Operating Report required by Condition 79 the 12-month rolling natural gas use for Source ID(s) EU21, EU22, and EU23.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

Fuel Sulfur Content Limits

7. The Permittee shall for Source ID(s) EU21 through EU23, limit natural gas fuel sulfur to less than 2,000 grains per million dry standard cubic feet. Record and report compliance in the following manner:

7.1 For each month, convert the fuel H_2S parts per million determined under condition 5.6 into grains per million dry standard cubic feet in accordance with the following equation:

$$X = \frac{Y}{0.0166}$$

where, X is grains of sulfur per million dry standard cubic foot and Y is the measured fuel H_2S concentration in dry standard parts per million.

7.2 Report under Condition 77 whenever you receive fuel that does not meet the requirements of Condition 7. When reporting under this Condition, include the conversion calculation performed under condition 7.1.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

8. The Permittee shall for Source ID EU01, limit diesel fuel sulfur to less than 0.25 percent by weight:

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

8.1 The Permittee shall do one of the following for each shipment of fuel:

a. If the fuel grade requires a sulfur content less than 0.25 percent by weight, keep receipts that specify fuel grade and amount; or

b. If the fuel grade does not require a sulfur content less than 0.25 percent by weight, keep receipts that specify fuel grade and amount and

(i) test the fuel for sulfur content; or

(ii) obtain test results showing the sulfur content of the fuel from the supplier, refinery; or through facility contractor. The test results must include a statement signed by the supplier, refinery, or facility contractor, of what fuel they represent.

8.2 Fuel testing under condition 8.1 must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the Department.

8.3 If a load of fuel contains greater than 0.25 percent sulfur by weight, the Permittee shall calculate SO_2 emissions in ppm using either Section 17 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

8.4 The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 8.3 exceed 500 ppm, the Permittee shall report under Condition 77. When reporting under this Condition, include the calculation under Section 17.

b. The Permittee shall include in the report required by Condition 79

(i) a list of the fuel grades received at the facility during the reporting period;

(ii) for any grade with a maximum fuel sulfur greater than 0.25 percent sulfur, the fuel sulfur of each shipment; and

(iii) for fuel with a sulfur content greater than 0.25 percent, the calculated SO_2 emissions in ppm.

[18 AAC 50.350(g) - (h), 1/18/97]

9. For each of Source ID(s) EU21 through EU23, record and keep on file at the facility,

9.1 The stack location, diameter, and height,

9.2 The exhaust temperature in degrees Kelvin, and

9.3 The exhaust actual flow rate in cubic meters per second.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

10. For Source ID(s) EU21, EU22, and EU23:

10.1 Record the date of startup for each source, and

10.2 Provide in the next Facility Operating Report required under Condition 79 a summary table showing the date of startup for each source, the rated heat input of each source and the total capacity of boilers, and the total capacity of hot water heaters in MMBtu per hour that were brought into operation during the operating period.

[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

Owner Requested Limits

11. The Permittee shall limit the hours of operation for Source ID(s) EU02 through EU06 and EU13 through EU20 as follows:

Table 3 –Operating Hours Limits

Sources	Operating Hours 12-month Limit
EU02 - EU06	240 hours each source
EU13 - EU20	250 hours each source

11.1 For Source ID(s) EU02 through EU06 and EU13 through EU20 monitor as follows:

a. measure and record the hours each source operated;

b. calculate and record the fuel burned during the most recent consecutive 12 month period; and

c. report monthly hours of operation and the fuel consumption during the most recent consecutive 12 month period of each source in the Facility Operating Report required by Condition 79.

[18 AAC 50.350(g) - (i), 5/03/02]
[18 AAC 50.350(d)(1)(D), 1/18/97]
[Construction Permit No. 237CP03, 10/06/03]

Sources Subject to Federal New Source Performance Standards (NSPS) 40 CFR 60 Subpart A

12. The Permittee shall comply with the applicable portions of 40 CFR 60, Subpart A.

[18 AAC 50.040(a)(1), 8/15/02]
[40 CFR 60, Subpart A, 7/01/01]

Volatile Organic Liquid Storage Vessels (Tanks) Subject to NSPS 40 CFR 60 Subpart Kb

13. NSPS Subpart Kb Requirements (Recordkeeping Only). For Source ID EU08, the Permittee shall keep readily accessible records for the life of the fuel storage tank showing the dimensions and an analysis showing the capacity of the tank.

[18 AAC 50. 350(h), 5/03/02 & 18 AAC 50.040(a)(2)(M), 8/15/02]
[40 C.F.R. 60.110(c) and 60.116b(a) & (b), Subpart Kb, 7/01/01]

Sources Subject to Municipal Solid Waste Landfill Requirements, Source ID EU09

14. For approval, a State plan shall require each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume to submit an initial design capacity report to the Administrator as provided in § 60.757(a)(2) of subpart WWW by the date specified in § 60.35c of this subpart. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided in paragraph (d)(1) and (d)(2) of this section.

14.1 The owner or operator shall submit an amended design capacity report as provided in § 60.757(a)(3) of subpart WWW. [Guidance: Note that if the design capacity increase is the result of a modification, as defined in § 60.751 of subpart WWW, that was commenced on or after May 30, 1991, the landfill will become subject to subpart WWW instead of this subpart. If the design capacity increase is the result of a change in operating practices, density, or some other change that is not a modification, the landfill remains subject to this subpart.]

14.2 When an increase in the maximum design capacity of a landfill with an initial design capacity less than 2.5 million megagrams or 2.5 million cubic meters results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with paragraph (e) of this section.

[40 C.F.R. 60, Subpart Cc & 61 FR 9905, March 12, 1996]

Sources Subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart A

15. The Permittee shall comply with general provisions described in 40 CFR 61, Subpart A.

[40 CFR 61, Subpart A, revised July 1, 2001]
[18 AAC 50.040(b)(1), 8/15/02]

Sources Subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subpart M (National Emission Standards for Asbestos)

16. Prior to commencement of the demolition or renovation, thoroughly inspect the facility or part of the facility where the demolition or renovation will occur for the presence of asbestos, including Category I and Category II non-friable asbestos-containing material (ACM).

[40 CFR 61.145(a), Subpart M, 7/01/01]
[18 AAC 50.040(b)(3), (b)(4) & (b)(5), 8/15/02]

17. The requirements of Conditions 16 through 24 apply to owners or operators of a demolition or renovation activity, including the removal of RACM.

[40 CFR 61.145(a) subparagraphs (1), (2), (3), and (4), Subpart M, 7/01/01]

18. Owners or operators of demolition or renovation activity to which this section applies are exempt from 40 CFR 61.05 (a), 61.07, and 61.09.

[40 CFR 61.145(a)(5), Subpart M, 7/01/01]

19. Each owner or operator of a demolition or renovation activity to which 40 CFR 61.145 applies shall follow the notification requirements as outlined in 40 CFR 61.145 (b).

[40 CFR 61.145(b), Subpart M, 7/01/01]

20. Each owner or operator of a demolition or renovation activity to which 40 CFR 61.145 applies shall follow the notification requirements as outlined in 40 CFR 61.145 (c).

[40 CFR 61.145(c), Subpart M, 7/01/01]

21. Each owner or operator of any source covered under the provisions of 40 CFR 61.145 shall comply with the provisions of 40 CFR 61.150.

[40 CFR 61.150, Subpart M, 7/01/01]

22. The owner or operator who uses air cleaning as specified in 40 CFR 61.145 and 61.150 shall meet the requirements of 40 CFR 61.152.

[40 CFR 61.152, Subpart M, 7/01/01]

23. Each owner or operator of any source covered under the provisions of 40 CFR 61.150 shall meet the requirements of 40 CFR 61.154.

[40 CFR 61.154, Subpart M, 7/01/01]

24. Annual certification will be required to maintain compliance. Maintain records relating to disposal of asbestos in the landfill until closure. Upon closure, comply with the provisions of 40 CFR 61.151.

[40 CFR 61.151, Subpart M, 7/01/01]

Sources Subject to the National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63, Subpart A

25. The Permittee shall comply with the applicable portions of 40 CFR 63, Subpart A.

[40 CFR 63, Subpart A, 4/05/02]
[18 AAC 50.040(c)(1), 6/01/02]

Sources Subject to National Perchloroethylene Air Emission Standards for Dry Cleaning Facility, 40 CFR 63, Subpart M, Source ID EU07

26. The provisions of this subpart apply to the owner or operator of each dry cleaning facility that uses perchloroethylene.

26.1 Each dry cleaning system that commences construction or reconstruction on or after December 9, 1991, shall be in compliance with the provisions of this subpart beginning on September 22, 1993 or immediately upon startup, whichever is later, except for dry cleaning systems complying with section 112(i)(2) of the Clean Air Act.

[40 CFR 63, Subpart M – 63.320(a)(b), December 14, 1999]
[18 AAC 50.040(c)(4), 601/02]

26.2 The owner or operator of each new dry-to-dry machine and its ancillary equipment and of each new transfer machine system and its ancillary equipment installed after September 22, 1993:

a. Shall route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device;

b. Shall eliminate any emission of perchloroethylene during the transfer of articles between the washer and dryer(s); and shall pass the air-perchloroethylene gas-vapor stream from inside the dry cleaning machine drum through a carbon adsorber or equivalent control device immediately before or as the door of the dry cleaning machine is opened if the dry cleaning machine is located at a major source.

26.3 The owner or operator shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times.

26.4 The owner or operator of each dry cleaning system shall operate and maintain the system according to the manufacturers' specifications and recommendations.

26.5 Each refrigerated condenser used for the purposes of complying with paragraph (a) or (b) of this section and installed on a dry-to-dry machine, dryer, or reclaimer:

a. Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;

b. Shall be monitored according to 63.323 (a)(1); and

c. Shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.

26.6 Each refrigerated condenser used for the purpose of complying with paragraph (a) of this section and installed on a washer:

a. Shall be operated to not vent the air-perchloroethylene gas-vapor contained within the washer to the atmosphere until the washer door is opened;

26.7 Shall be monitored according to 63.323 (a)(2); and

26.8 Shall not use the same refrigerated condenser coil for the washer that is used by a dry-to-dry machine, dryer, or reclaimer.

26.9 The owner or operator of an affected facility shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall treat such filters in an equivalent manner, before removal from the dry cleaning facility.

26.10 The owner or operator of an affected facility shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.

26.11 The owner or operator of a dry cleaning system shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:

a. Hose and pipe connections, fittings, couplings, and valves;

b. Door gaskets and seatings;

c. Filter gaskets and seatings;

d. Pumps;

e. Solvent tanks and containers;

f. Water separators;

g. Muck cookers;

h. Stills;

i. Exhaust dampers;

j. Diverter valves; and

k. Cartridge filter housings.

26.12 The owner or operator of a dry cleaning system shall repair all perceptible leaks detected under paragraph (k) of this section within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within 2 working days of detecting such a leak. Such repair parts shall be installed within 5 working days after receipt.

26.13 If parameter values monitored under paragraphs (e), (f), or (g) of this section do not meet the values specified in 63.323 (a), (b), or (c), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt.

[61 FR 49263, 40 CFR 63, Subpart M, 63.322(b) – (f), (i) – (k), and (m)(n), Sept. 19, 1996]

26.14 When a refrigerated condenser is used to comply with 63.322 (a)(1) or

26.15 The owner or operator shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer weekly with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of 1.1 °C (2 °F).

[40 CFR 63, Subpart M, 63.323(a), December 14, 1999]

26.16 Each owner or operator of a dry cleaning facility shall submit an initial report signed by a responsible official before a notary public certifying that the information provided in the initial report is accurate and true to the Administrator within 90 calendar days after September 22, 1993, which includes the following:

a. The name and address of the owner or operator;

b. The address (that is, physical location) of the dry cleaning facility;

c. A brief description of the type of each dry cleaning machine at the dry cleaning facility;

d. Documentation as described in 63.323 (d) of the yearly perchloroethylene consumption at the dry cleaning facility for the previous year to demonstrate applicability according to 63.320; or an estimation of perchloroethylene consumption for the previous year to estimate applicability with 63.320; and

e. A description of the type of control device(s) that will be used to achieve compliance with 63.322 (a) or (b) and whether the control device(s) is currently in use or will be purchased.

f. Documentation to demonstrate to the Administrator's satisfaction that each room enclosure used to meet the requirements of 63.322 (a)(3) meets the requirements of 63.322 (a)(3) (i) and (ii).

(a) Each owner or operator of a dry cleaning facility shall submit a statement signed by a responsible official in the presence of a notary public to the Administrator by registered letter on or before the 30th day following the compliance dates specified in 63.320 (b) or (c), certifying the following:

(1) The yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to 63.323 (d);

(2) Whether or not they are in compliance with each applicable requirement of 63.322; and 63.324(b)(3).

(b) Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years:

(1) The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchases; if no perchloroethylene is purchased during a given month then the owner or operator would enter zero gallons into the log;

(2) The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month as specified in 63.323 (d);

(3) The dates when the dry cleaning system components are inspected for perceptible leaks, as specified in 63.322 (k) or (l), and the name or location of dry cleaning system components where perceptible leaks are detected;

(4) The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with 63.322 (m) and (n);

(5) The date and temperature sensor monitoring results, as specified in 63.323 if a refrigerated condenser is used to comply with 63.322 (a) or (b).

(c) Each owner or operator of a dry cleaning facility shall retain onsite a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

[40 CFR 63, Subpart M, 63.324 (a) – (c), December 14, 1999]

Section 6. Visible Emissions and PM Monitoring, Recordkeeping and Reporting

Liquid-Fired Sources, Source ID(s) EU02 through EU06 and EU13 through EU20

27. Visible Emissions Monitoring. The Permittee shall observe the exhaust of Source ID(s) EU02 through EU06 and EU13 through EU20 for visible emissions using either the Method 9 Plan under Condition 27.1 or the Smoke/No-Smoke Plan under Condition 27.2. The Permittee may change visible-emissions plans for a source at any time unless prohibited from doing so by Condition 27.3.

[18 AAC 50.350(g), 1/18/97 & 50.346(c), 5/03/02]

27.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation. Observe exhaust for 18 minutes for Source ID(s) EU02 through EU06 and EU13 through EU20 within six months after the issue date of this permit or within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 27.2, whichever is later.

b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that a source operates.

c. Semi-annual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 27.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semi-annually for 18 minutes.

Semi-annual observations must be taken between four and seven months after the previous set of observations.

d. Annual Method 9 Observations. After at least two semi-annual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations and must include at least three 18-minute sets of observations.

e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that source to at least monthly intervals, until the criteria in Condition 27.1c for semi-annual monitoring are met.

27.2 **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that a source operates.

b. Reduced Monitoring Frequency. After the source has been observed on 30 consecutive operating days, if the source operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that a source operates.

c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of Condition 27.1 or perform the corrective action required under Condition 27.3.

27.3 **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 27.2, then the Permittee shall either follow the Method 9 plan of Condition 27.1 or

a. initiate actions to eliminate smoke from the source within 24 hours of the observation;

b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and

c. after completing the actions required under Condition 27.3a,

(i) take Smoke/No Smoke observations in accordance with Condition 27.2

(A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and

(B) continue as described in Condition 27.2b; or

(ii) if the actions taken under Condition 27.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 27.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 27.2a.

28. Visible Emissions Recordkeeping. The Permittee shall keep records in accordance as follows.

[18 AAC 50.350(h) & 50.346(c), 5/03/02]

28.1 If using the Method 9 Plan of Condition 27.1

a. the observer shall record

(i) the name of the facility, emissions source and location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 16;

(ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky Condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Section 16, and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;

b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;

c. calculate and record the highest 18-consecutive-minute averages observed.

28.2 If using the Smoke/No Smoke Plan of Condition 27.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

a. the date and time of the observation;

b. from Table 1, the ID of the source observed;

c. whether visible emissions are present or absent in the exhaust;

d. a description of the background to the exhaust during the observation;

e. if the source starts operation on the day of the observation, the startup time of the source;

f. name and title of the person making the observation; and

g. operating rate (load or fuel consumption rate).

29. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

[18 AAC 50.350(i), 1/18/97 & 50.346(c), 5/03/02]

29.1 include in each Facility Operating Report under Condition 79

a. which visible-emissions plan of Condition 27 was used for each source; if more than one plan was used, give the time periods covered by each plan;

b. for each source under the Method 9 Plan,

(i) copies of the observation results (i.e. opacity observations) for each source that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

(C) dates when one or more observed six-minute averages were greater than 20 percent;

c. for each source under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and

d. a summary of any monitoring or recordkeeping required under Conditions 27 and 28 that was not done;

29.2 report under Condition 77:

a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and

b. if any monitoring under Condition 27 was not performed when required, report within three days of the date the monitoring was required.

30. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines, EU02 through EU06 and EU13 through EU20 to determine the concentration of particulate matter (PM) in the exhaust of a source in accordance with this Condition 30.

[18 AAC 50.350(g), 1/18/97 & 50.346(c), 5/03/02]

30.1 Within six months of exceeding the criteria of Condition 30.2a or 30.2b, either

a. conduct a PM source test according to requirements set out in Section 12 ; or

b. make repairs so that emissions no longer exceed the criteria of Condition 30.2; to show that emissions are below those criteria, observe emissions as described in Condition 27.1 under load Conditions comparable to those when the criteria were exceeded.

30.2 Conduct the test according to Condition 30.1 if

a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or

b. for a source with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

30.3 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

30.4 The automatic PM source test requirement in Condition 31 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

31. Particulate Matter Recordkeeping for Diesel Engines. Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter(s) of Source ID(s) EU02 through EU06 and EU13 through EU20. Report the stack diameter(s) in the next Facility Operating Report under Condition 79.

[18 AAC 50.350(h) & 50.346(c), 5/03/02]

32. Particulate Matter Reporting for Diesel Engines. The Permittee shall report as follows:

[18 AAC 50.350(i), 1/18/97 & 50.346(c), 5/03/02]

32.1 report under Condition 77

a. the results of any PM source test that exceeds the PM emissions limit; or

b. if one of the criteria of Condition 30.2 was exceeded and the Permittee did not comply with either Condition 30.1a or 30.1b, this must be reported by the day following the day compliance with Condition 30.1 was required;

32.2 report observations in excess of the threshold of Condition 30.2b within 30 days of the end of the month in which the observations occur;

32.3 in each Facility Operating Report under Condition 79, include

a. the dates, Source ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 30.2;

b. a summary of the results of any PM testing under Condition 30; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 30.2, if they were not already submitted.

Dual Fuel-Fired Source ID EU01 (only when operating on a back-up liquid fuel):

33. The Permittee shall monitor, record and report the monthly hours of operation when operating on a back-up liquid fuel.

33.1 If source ID EU01 does not exceed 400 hours of operations per calendar year per source on a back-up liquid fuel, monitoring of compliance for visible emissions and particulate matter is not required. Monitoring shall consist of an annual compliance certification under Condition 80 with Conditions 3 and 4.

33.2 Source ID EU01 is subject to the liquid fuel monitoring requirements described in Conditions 27 and 30 if operations exceed 400 hours per calendar year on a back-up liquid fuel.

33.3 The Permittee must notify the Department and begin monitoring the affected source according to Conditions 27 and 30 no later than 15 days after the end of a calendar month in which the cumulative hours of operation for the calendar year exceed 400 hours on a back-up liquid fuel.

33.4 Report under Condition 77 if the Permittee fails to comply with Condition 33.3.

[18 AAC 50.346(c) & 50.350(g) – (i), 5/03/02]

Section 7. Facility-Wide Requirements

34. Source Aggregation. The Permittee shall aggregate potential emissions from Source ID(s) EU01 through EU23 from the facility for the purpose of determining applicability with the modification requirements of 18 AAC 50.300(h)(3).

[18 AAC 50.990(37), 1/18/97]
[18 AAC 50.910, 1/18/97]

35. NESHAPs Applicability Determinations. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 CFR 63) in accordance with the procedures described in 40 CFR 63.1(b). If a source becomes affected by an applicable subpart of 40 CFR 63, Permittee shall achieve compliance with applicable provisions as expeditiously as practical after publication of final rule, but not later than three years after promulgation of a final rule.

35.1 The Permittee must keep a record of the applicability determination on site for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected. The analysis (or other information) must be sufficiently detailed to allow the Department to make a finding about the source's applicability status with regard to the relevant standard or other requirement.

[40 C.F.R. 63.1(b), 63.6(c)(1) & 63.10(b), 4/05/02]
[18 AAC 50.350(h), 5/03/02; 18 AAC 50.040(c)(1)(A) & (E), 6/1/02]

Protection of Stratospheric Ozone, 40 CFR 82 Subpart E - Source ID EU12

36. The labeling of products using ozone depleting substances. The requirements of Subpart E apply to (1) containers in which Class I or II substances are stored or transported; (2) all products containing a Class I substance; (3) all products directly manufactured with a process that uses a Class I substance, unless otherwise exempted by this Subpart, or the Administrator determines for a particular product that there are no substitutes.

[40 CFR 82.102. 07/01/01]

37. All containers that store or transport Class I or Class II chemicals should be labeled "WARNING: Contains [or Manufactured with, if applicable] [*insert name of substance]*, a substance which harms public health and environment by destroying ozone in the upper atmosphere", unless the chemicals stored are "bound to be discarded for no future use," and must meet the requirements of this Subpart.

[40 CFR 82.106(a), 07/01/01]

38. The warning label shall be placed so as to satisfy the requirement of the Act that the warning statement be "clearly legible and conspicuous." The warning statement is clearly legible and conspicuous if it appears with such prominence and conspicuousness as to render it likely to be read and understood by consumers under normal conditions of purchase. The details of replacement can be found in Sections (a) through (d) of this subsection.

[40 CFR 82.108, 07/01/01]

39. The warning statement shall appear in conspicuous and legible type by typography, layout, and color with other printed matte on the label. The warning statement shall appear in sharp contrast to any background upon which it appears. Other general labeling requirements can be found in Sections (a) through (f) of this Subpart.

[40 CFR 82.110, 07/01/01]

40. Person servicing appliances containing > 50 lbs. of refrigerant must provide the owner with documentation with the amount of refrigerant added to the appliance.

[40 CFR 82.166(j), 07/01/01]

41. The owner of the appliances containing > than 50 lbs. of refrigerant must keep servicing records documenting the date and type of service as well as the quantity of refrigerant added. The owner must keep records of refrigerant purchases and added to such appliances in cases where owners add their own refrigerant.

[40 CFR 82.166(k), 07/01/01]

42. Technicians certified under §82.161 must keep a copy of their certificate at their place of business.

[40 CFR 82.166(l), 07/01/01]

43. All records must be maintained for a minimum of 3 years onsite.

[40 CFR 82.166(m), 07/01/01

44. Effective, June 14, 1993, no person servicing, repairing, or disposing of appliances may knowingly vent any Class I or Class II substance to the atmosphere. De minimus releases are not subject to the above. No person shall open appliances except MVACs and may not dispose of appliances except for small appliances and Motor Vehicle Air Conditions (MVACs) and MVAC-like appliances without observing §82.156 and without using certified equipment pursuant to §82.158. No person shall recover refrigerant from small appliances and MVACs and MVAC-like appliances for the purposes of disposal unless they are certified pursuant to §82.162 that recovery equipment meets the standards set forth in §82.158 and that such person is complying with the applicable requirements of this Subpart.

[40 CFR 82.154(a)(b)(f), 07/01/01]

45. Entire subpart applies to all persons disposing of appliances except for small appliances, MVACs and MVAC-like appliances or opening appliances for maintenance, service or repair.

[40 CFR 82.156, 07/01/01]

46. Technicians must be trained in an approved certification program that depends on what they work on (i.e., Type I, II, III, or Universal).

[40 CFR 82.161(i), 07/01/01]

47. Owner must certify to the Administrator that such persons servicing appliances, other than MVACs and small appliances, or recovering refrigerant from small appliances, MVACs and MVAC-like appliances for purposes of disposal have acquired equipment and are complying with the applicable requirements of the applicable requirements of the Subpart. Certificates are not transferable.

[40 CFR 82.162(a)(b), 07/01/01]

48. Persons disposing of MVACs and/or appliances must maintain for 3 years copies of signed statements obtained pursuant of §82.156 (f)(2) and must adhere to the standards for recycling and recovery equipment identified in §82.158.

[40 CFR 82.158 and 40 CFR 82.166(i), 07/01/01]

49. This Subpart applies to any person(s) servicing maintaining and repairing appliances except for MVACs or disposing of appliances including MVACs. In addition, this Subpart applies to appliance owners.

[40 CFR 82.150, 07/01/01]

50. These sections define information that must be maintained onsite and reported to EPA when such reporting and recordkeeping is required (i.e., leak rates, full charge).

[40 CFR 82 and 18 AAC 50.040(d), 07/01/01]

Section 8. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant sources that the Department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to these sources.

51. For sources that are insignificant as defined in 18 AAC 50.335(q)-(v) that are not listed in this permit, the following apply:

51.1 The Permittee shall submit the compliance certifications, as described in Condition 80, based on reasonable inquiry;

51.2 The Permittee shall comply with the requirements of Condition 60;

51.3 The Permittee shall report in the Facility Operating Report required by Condition 79 if a source is insignificant because of actual emissions less than the thresholds of 18 AAC 50.335(r) and actual emissions become greater than any of those thresholds;

51.4 No other monitoring, recordkeeping or reporting is required

[18 AAC 50.346(b)(1), 5/03/02]

52. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, or fuel-burning equipment to reduce visibility through the exhaust effluent by any of the following:

52.1 more than 20 percent for a total of more than three minutes in any one hour[4];

[18 AAC 50.050(a)(2) & 50.055(a)(1), 1/18/97]
[40 C.F.R. 52.70, 7/01/01]

52.2 more than 20 percent averaged over any six consecutive minutes[5].

[18 AAC 50.050(a) & 50.055(a)(1), 5/03/02]

53. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard Conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

[4] See Footnote 1.
[5] See Footnote 2.

Section 9. Compliance Plan

54. The Permittee has requested Owner Requested Limits (ORL's) for EU13 through EU20 in condition 11 to correct historical PSD noncompliance. As set out in 18 AAC 50.350(k)(5), the compliance plan and schedule included in Operating Permit Number 237TVP01 does not provide the shield of AS 46.14.290 and does not prevent the Department from pursuing an enforcement action. The facility was modified by the addition of Source ID(s) EU13 through EU20.

54.1 A 12 month rolling total of operating hours will be maintained of individual generator operation.

54.2 Individual generator operating hours will be reported semi-annually in the Facility Operating Report as described in Condition 79.

54.3 No progress reports will be required since condition 54.1 and 54.2 are applicable immediately upon issuing Operating Permit 237TVP01.

[18 ACC 50.350(k)(3) & (k)(5), 1/18/97]

Section 10. Generally Applicable Requirements

55. Good Air Pollution Control Practice. The Permittee shall do the following for Source ID(s) EU01 through EU06 and EU13 through EU23:

a. perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

b. keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

c. keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030 & 50.346(b)(2), 5/03/02 & 18 AAC 50.350(f)(2) & (3), 1/18/97]

56. Dilution. The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a), 1/18/97]

57. Reasonable Precautions to Prevent Fugitive Dust. A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

[18 AAC 50.346(c), 5/03/02; 18 AAC 50.045(d) & 50.350(g), 1/18/97 & 18 AAC 50.040(e), 8/15/02]

57.1 The Permittee shall keep records of

a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and

b. any additional precautions that are taken

(i) to address complaints described in condition 57.1 or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

[18 AAC 50.350(h), 5/03/02]

57.2 The Permittee shall report according to condition 60.

[18 AAC 50.350(i), 5/03/02]

58. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the Department.

[18 AAC 50.055(g), 1/18/97]

59. Open Burning. The Permittee shall comply with the following requirements when conducting open burning at the facility.

59.1 **General Requirements**. Except when conducting open burning under 59.7, 59.8, or 59.9, a person conducting open burning shall comply with the limitations of 59.2 - 59.6 and shall ensure that

a. the material is kept as dry as possible through the use of a cover or dry storage;

b. before igniting the burn, non-combustibles are separated to the greatest extent practicable;

c. natural or artificially induced draft is present;

d. to the greatest extent practicable, combustibles are separated from grass or peat layer;

e. combustibles are not allowed to smolder; and

f. sufficient written records are kept to demonstrate that the Permittee complies with the limitations in this condition. Upon request of the Department, submit copies of the records.

59.2 **Black Smoke Prohibited**. Except for firefighter training conducted under 59.8 or 59.9, open burning of asphalts, rubber products, plastics, tars, oils, oily wastes, contaminated oil cleanup materials, or other materials in a way that gives off black smoke is prohibited without written Department approval. Department approval of open burning as an oil spill response countermeasure is subject to the Department's *In Situ Burning Guidelines for Alaska*, adopted by reference in 18 AAC 50.035. Open burning approved under this subsection is subject to the following limitations:

a. Open burning of liquid hydrocarbons produced during oil or gas well flow tests may occur only when there are no practical means available to recycle, reuse, or dispose of the fluids in a more environmentally acceptable manner;

b. The person who conducts open burning shall establish reasonable procedures to minimize adverse environmental effects and limit the amount of smoke generated; and

c. The Department will, in its discretion, as a condition of approval issued under this subsection, require public notice as described in 59.10.

59.3 **Toxic and Acid Gases and Particulate Matter Prohibited**. Open burning or incineration of pesticides, halogenated organic compounds, cyanic compounds, or polyurethane products in a way that gives off toxic or acidic gases or particulate matter is prohibited.

59.4 **Adverse Effects Prohibited**. Open burning of putrescible garbage, animal carcasses, or petroleum-based materials, including materials contaminated with petroleum or petroleum derivatives, is prohibited if it causes odor or black smoke that has an adverse effect on nearby persons or property.

59.5 **Air Quality Advisory**. Open burning is prohibited in an area if the Department declares an air quality advisory under 18 AAC 50.245, stating that burning is not permitted in that area for that day.

59.6 **Wood Smoke Control Areas**. Open burning is prohibited between November 1 and March 31 in a wood smoke control area identified in 18 AAC 50.025(b).

59.7 **Controlled Burning**. Controlled burning to manage forest land, vegetative cover, fisheries, or wildlife habitat, other than burning to combat a natural wildfire, requires written Department approval if the area to be burned exceeds 40 acres yearly. The Department will, in its discretion, require public notice as described in 59.10 of this section.

59.8 **Firefighter Training: Structures**. A fire service may open burn structures for firefighter training without ensuring maximum combustion efficiency under the following circumstances:

a. Before igniting the structure, the fire service shall

(i) obtain Department approval for the location of the proposed firefighter training; approval will be based on whether the proposed open burning is likely to adversely affect public health in the neighborhood of the structure;

(ii) visually identify materials in the structure that might contain asbestos, test those materials for asbestos, and remove all materials that contain asbestos;

(iii) ensure that the structure does not contain

(A) putrescible garbage;

(B) electrical batteries;

(C) stored chemicals such as fertilizers, pesticides, paints, glues, sealers, tars, solvents, household cleaners, or photographic reagents;

(D) stored linoleum, plastics, rubber, tires, or insulated wire;

(E) hazardous waste;

(F) lead piping;

(G) plastic piping with an outside diameter of four inches or more; or

(H) urethane or another plastic foam insulation;

(iv) provide public notice consistent with 59.10; and

(v) ensure that a fire-service representative is on-site before igniting the structure;

b. the fire service shall ignite and conduct training on only one main structure and any number of associated smaller structures at a time; examples of associated smaller structures are garages, sheds, and other outbuildings; and

c. the fire service shall respond to complaints in accordance with 59.11.

59.9 **Firefighter Training: Fuel Burning**. Unless a greater quantity is approved by the Department, a fire service may open burn up to 250 gallons of uncontaminated fuel daily and up to 600 gallons yearly for firefighter training without ensuring maximum combustion efficiency. To conduct this training without prior written Department approval, the fire service shall

a. provide public notice consistent with 59.10 before burning more than 20 gallons of uncontaminated fuel, unless waived in writing by the Department; and

b. respond to complaints in accordance with 59.11.

59.10 **Public Notice**. A person required to provide public notice of open burning shall issue the notice through local news media or by other appropriate means if the area of the open burning does not have local news media. The public notice must be issued as directed by the Department and must

a. state the name of the person conducting the burn;

b. provide a list of material to be burned;

c. provide a telephone number to contact the person conducting the burn before and during the burn;

d. for a surprise fire drill, state

(i) the address or location of the training; and

(ii) the beginning and ending dates of the period during which a surprise fire drill may be conducted (this period may not exceed 30 days); and

e. for open burning other than a surprise fire drill, state the expected time, date, and location of the open burning.

59.11 **Complaints**. A person required to provide public notice of open burning shall

a. make a reasonable effort to respond to complaints received about the burn;

b. keep, for at least 30 days, a record of all complaints received about the burn, including to the extent feasible

(i) the name, address, and telephone number of each person who complained;

(ii) a short summary of each complaint; and

(iii) any action the person conducting the open burning took to respond to each complaint; and

c. upon request, provide the Department with a copy of the records kept under 59.11b.

[18 AAC 50.065, 1/18/97 & 50.350(g) – (i), 5/03/02]

60. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.346(a)(2), 5/03/02 & 18 AAC 50.110, 5/26/72]

60.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 77.

60.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 60.

60.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the facility have caused or are causing a violation of condition 60; or

b. the Department notifies the Permittee that it has found a violation of condition 60.

60.4 The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of condition 60; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

60.5 With each facility operating report under condition 79, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

60.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a)(2) & 50.350(g) - (i), 5/03/02]

61. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard[6] , the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under condition 77 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 77.

[18 AAC 50.235(a) & 50.350(f)(3), 1/18/97]

62. Permit Renewal. To renew this permit, the Permittee shall submit an application under 18 AAC 50.335 no sooner than **June 30, 2007** and no later than **June 30, 2008.**

[18 AAC 50.335(a), 1/18/97]

[6] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 11. General Source Testing and Monitoring Requirements

63. Requested Source Tests. In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 1/18/97 & 18 AAC 50.345(a) & (k), 5/03/02]

64. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b) & 50.350(g), 1/18/97]

64.1 at a point or points that characterize the actual discharge into the ambient air; and

64.2 at the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.

65. Reference Test Methods. The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

65.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.220(c)(1)(A) & 50.350(g), 1/18/97 & 18 AAC 50.040(a), 8/15/02]
[40 C.F.R. 60, 7/01/01]

65.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 8/15/02; 50.220(c)(1)(B) & 50.350(g), 1/18/97]
[40 C.F.R. 61, 7/01/01]

65.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 6/01/02; 18 AAC 50.220(c)(1)(C) & 50.350(g), 1/18/97]
[40 C.F.R. 63, 4/05/02]

65.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Section 15 to record data.

[18 AAC 50.030, 5/03/02, 18 AAC 50.220(c)(1)(D) & 50.350(g), 1/18/97]

65.5 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 8/15/02 & 18 AAC 50.220(c)(1)(E) & 50.350(g), 1/18/97]
[40 C.F.R. 60, Appendix A, 7/01/01]

65.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[`18 AAC 50.035(b)(2), 7/02/00; 18 AAC 50.220(c)(1)(F) & 50.350(g), 1/18/97]
[40 C.F.R. 51, Appendix M, 7/01/99]

65.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(19), 6/01/02 & 18 AAC 50.220(c)(2) & 50.350(g), 1/18/97]
[40 C.F.R. 63, Appendix A, Method 301, 4/05/02]

66. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 18 AAC 50.350(g), 1/18/97 & 18 AAC 50.990(88), 5/03/02]

67. Test Exemption. The Permittee is not required to comply with conditions 69, 70 and 71 when the exhaust is observed for visible emissions by Method 9 Plan (condition 27.1) or Smoke/No Smoke Plan (condition 27.2)

[18 AAC 50.345(a), 5/03/02]

68. Test Deadline Extension. The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l), 5/03/02]

69. Test Plans. Except as provided in condition 67, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under condition 63 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(a) & (m), 5/03/02]

70. Test Notification. Except as provided in condition 67, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n), 5/03/02]

71. Test Reports. Except as provided in condition 67, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in condition 73. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o), 5/03/02]

72. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in conditions 4 and 53 the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f) & 50.350(g), 1/18/97]

Section 12. General Recordkeeping, Reporting, and Compliance Certification Requirements

73. Certification. The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official's signature must be notarized.

[18 AAC 50.205 and 50.350(b)(3) & (j), 1/18/97; and 18 AAC 50.345(a) & (j), 5/03/02]

74. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send two copies of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with condition 73.

[18 AAC 50.350(i), 1/18/97]

75. Information Requests. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200 & 50.350(b)(3), 1/18/97; and 18 AAC 50.345(a) & (i) & 50.350(g) – (i), 5/03/02]

76. Recordkeeping Requirements. The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

[18 AAC 50.350(h), 5/03/02]
[40 C.F.R. 60.7(f), Subpart A, 7/01/01]

76.1 copies of all reports and certifications submitted pursuant to this section of the permit; and

76.2 records of all monitoring required by this permit, and information about the monitoring including:

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

b. sampling dates and times of sampling or measurements;

c. the operating conditions that existed at the time of sampling or measurement;

d. the date analyses were performed;

e. the location where samples were taken;

f. the company or entity that performed the sampling and analyses;

g. the analytical techniques or methods used in the analyses; and

h. the results of the analyses.

77. Excess Emissions and Permit Deviation Reports.

77.1 Except as provided in condition 60, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions 77.1c(ii) and 77.1c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under condition 77.1c(i); and

(iii) for failure to monitor, as required in other applicable conditions of this permit.

77.2 When reporting excess emissions, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 18 of this permit. The Permittee must provide all information called for by the form that is used.

77.3 When reporting a permit deviation, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 18 of this permit. The Permittee must provide all information called for by the form.

77.4 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), & 50.350(i), 1/18/97; and 18 AAC 50.346(a)(3), 5/03/02

78. NSPS and NESHAP Reports. The Permittee shall:

78.1 attach to the facility operating report required by condition 79, copies of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and

78.2 upon request by the Department, notify and provide a written copy of any EPA-granted waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules.

[18 AAC 50.040, 8/15/02 & 18 AAC 350(i)(2), 1/18/97]
[40 C.F.R. 60 &. 61, 7/01/01]

79. Operating Reports. During the life of this permit, the Permittee shall submit to the Department one original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

79.1 The operating report must include all information required to be in operating reports by other conditions of this permit.

79.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 79.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

(v) any corrective action or preventive measures taken and the date of such actions; or

b. When excess emissions or permit deviations have already been reported under condition 77 the Permittee may cite the date or dates of those reports.

79.3 The operating report must include a listing of emissions monitored under conditions 27.1, 27.1e, and 27.3 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

[18 AAC 50.346(b)(3), 5/03/02; 18 AAC 50.350(d)(4), 6/21/98 and 18 AAC 50.350(f)(3) & (i), 1/18/97]

80. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department one original and one copy of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

80.1 For each permit term and condition set forth in Section 4 through Section 12, including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4), 6/21/98]

a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;

b. state whether compliance is intermittent or continuous;

c. briefly describe each method used to determine the compliance status; and

d. notarize the responsible official's signature.

[18 AAC 50.205, 1/18/97 & 50.345(a) & (j), 5/03/02]

80.2 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j)(3), 1/18/97]

Section 13. Standard Conditions Not Otherwise Included in the Permit

81. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

81.1 an enforcement action;

81.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

81.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (c), 5/03/02]

82. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (d), 5/03/02]

83. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (e), 5/03/02]

84. Compliance with permit terms and conditions is considered to be compliance with those requirements that are

84.1 included and specifically identified in the permit; or

84.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (b), 5/03/02]

85. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (f), 5/03/02]

86. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (g), 5/03/02]

87. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

87.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

87.2 have access to and copy any records required by the permit;

87.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and

87.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (h), 5/03/02]

Section 14. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the facility application, this section of the permit contains the requirements determined by the Department not to be applicable to the **Fort Richardson**.

88. Table 4 and Table 5 identify the sources that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table 4 and Table 5 become applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

Table 4 - Permit Shields Granted, Emission Unit Specific.

Source ID	Non-Applicable Requirements	Reason for non-applicability
EU09	40 CFR 60, Subpart Cc, Guidelines of Control for Existing Sources: Municipal Solid Waste Landfills, except 40 CFR 60.35c, Subpart Cc.	Source was only required to submit an initial notification report {40 CFR 60.35c}. All other parts of the regulation do not apply because the landfill capacity is < 2.5Mg.

Table 5 - Permit Shields Granted, Facility-Wide.

Non-Applicable Requirements	Reason for non-applicability
40 CFR 63, Unpromulgated NESHAPS	Facility is no longer a major source for hazardous air pollutants.
40 CFR 51, Subpart W and 40 CFR 93, Subpart B, General Conformity	Facility is in attainment for all criteria pollutants.
40 CFR 60, Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60, Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquid(s) for which construction, reconstruction, or modification commenced after May 18, 1978 and Prior to July 23, 1984	Facility has no units affected by these regulations.
40 CFR 51.165 (a) and (b); AS 46.14.020 and 46.14.130 (a) (2), New Source Review	Facility is in attainment for all criteria pollutants.
18 AAC 50.050 (a) through (b), Incinerator Emission Standards	Facility has decommissioned all incinerators.
40 CFR 64, Compliance Assurance Monitoring Rule	The CAM Rule does not apply to any emission units at the facility.
40 CFR 68 Chemical and Accident Prevention Provisions	Facility does not store any of the listed chemicals above the threshold quantities cited in the regulation.

[18 AAC 50.350(l), 1/18/97]

Section 15. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company & Facility: _____

Location: _____

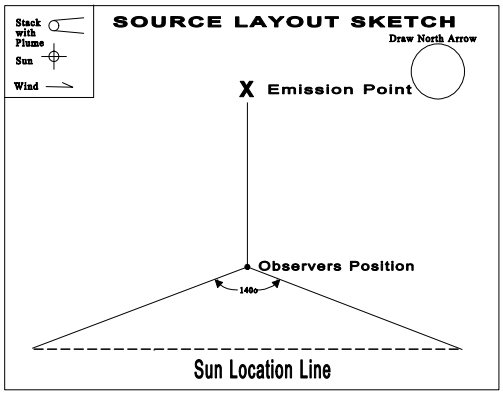
Test No.: _____ Date: _____

Source: _____

Production Rate/Operating Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description: Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Visible Emissions Observation Record

Page ___ of ___

Company & Facility _____ Certified Observer_____

Test Number _____ Clock time_____

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

_____ _____
Observer Signature and Date Certified By and Date

Data Reduction:
Duration of Observation Period (minutes) _____ Duration Required by Permit (minutes)_____
Number of Observations _____ Highest Six –Minute Average Opacity (%)_____
Number of Observations exceeding 20 % _____
In compliance with three-minute aggregate opacity limit? (Yes or No) _____
In compliance with six-minute opacity limit? (Yes or No) _____

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 16. SO_2 Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO_2 using the following equations:

$A = 31{,}200 \times [wt\%S_{fuel}] = 31{,}200 \times$ _____ = _____

$B = 0.148 \times [wt\%S_{fuel}] = 0.148 \times$ _____ = _____

$C = 0.396 \times [wt\%C_{fuel}] = 0.396 \times$ _____ = _____

$D = 0.933 \times [wt\%H_{fuel}] = 0.933 \times$ _____ = _____

$E = B + C + D =$ _____ + _____ + _____ = _____

$F = 20.9 - [vol\%_{dry}O_{2,\ exhaust}] = 20.9 -$ _____ = _____

$G = [vol\%_{dry}O_{2,\ exhaust}] \div F =$ _____ ÷ _____ = _____

$H = 1 + G = 1 +$ _____ = _____

$I = E \times H =$ _____ x _____ = _____

SO_2 concentration = $A \div I =$ _____ ÷ _____ = _____ ppm

The $wt\%S_{fuel}$, $wt\%C_{fuel}$, and $wt\%H_{fuel}$ are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition 5.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust ($vol\%_{dry}O_{2,\ exhaust}$) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if $\mathbf{wt\%S_{fuel}}$ = 1.0%, then enter 1.0 into the equations, not 0.01, and if $\mathbf{vol\%_{dry}O_{2,\ exhaust}}$ = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 5/03/02]

Section 17. ADEC Source Test Plan Form

The following form requires information that must be included in a source test plan. This form can be found at http://www.state.ak.us/local/akpages/ENV.CONSERV/dawq/aqm/stpforn.pdf.

ADEC Source/Performance Test Plan Summary Form

For EACH source being tested, attach a completed version of this form to the source test plans that are submitted to ADEC within 30 to 60 days prior to testing.

United States Army Garrison, **Alaska (USAG-AK)**

Name of Permittee

Fort Richardson

Facility Name

1. Reason for the Source/Performance Test:

❑ Permit Requirement: Provide the following information.

Permit #_____ Application # _____

Condition _____

Deadline for Completion of Source Testing: _____

❑ ADEC Request: Provide the following information.

Type of request: circle one of the following.

COBC NOV Letter Email Verbal Other (describe below)

If COBC or NOV, provide #_____

Date of the Request: _____

Deadline for Completion of Source Testing: _____

2. Source/Performance Test Information:

Source ID No.	
Source Name	
Air Pollution Control Device Being Tested	
Scheduled Testing Dates	
Pollutants Measured	
Reference Methods	
Number of Tests	
Test Conditions (Operational Loads)	
Number of Runs per Test Condition	
Duration of Each Test Run	

3. **Alternative Test Plans** (these require administrator approval): Detail proposed deviations from reference method protocol.

4. **Sample Port Location**: Attach a longitudinal section drawing of the test stack indicating the diameter or if the stack is rectangular, the cross sectional dimensions and the distances from the sampling ports to upstream and downstream disturbances.

5. **Traverse Point Locations for Velocity, Particulate, and Other Sampling**: Attach cross sectional drawings indicating the sampling sites with distances given for velocity, particulate, and other measurements.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name	Signature	Date

Section 18. ADEC Notification Form

Fax this form to: (907) 269-4589 Telephone: (907) 269-8888

United States Army Garrison, Alaska (USAG-AK)
Company Name

Fort Richardson
Facility Name

Reason for notification:

❑ **Excess Emissions**
If you checked this box
Fill out section 1

❑ **Other Deviation from Permit Condition**
If you checked this box
fill out section 2

When did you discover the Excess Emissions or Other Deviation:
Date:__/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

(b) Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?
❑ YES ❑ NO
Do you intend to assert the affirmative defense of 18 AAC 50.235?
❑ YES ❑ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: Signature: Date:

Alaska Department of Environmental Conservation

Air Permits Program

October 15, 2003

United States Army Garrison, Alaska (USAG-AK)

Fort Richardson

STATEMENT OF BASIS

of the terms and conditions for

Permit No. 237TVP01

Prepared by U.S. Army Center for Health Promotion and Preventive Medicine Field Office Alaska and ADEC's Randall E. Lucas

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. 237TVP01.

FACILITY IDENTIFICATION

Section 1 of Operating Permit Number 237TVP01 contains information on the facility as provided in the Title V Operating Permit application.

The facility is owned and operated by United States Army Garrison, Alaska (USAG-AK), and is the Permittee for the facility's operating permit. The SIC code for this facility is Fort Richardson.

Fort Richardson is part of the United States Army Garrison, Alaska (USAG-AK). The primary mission for this installation is to provide quality living, training, and "stand ready" for deployment commands.

SOURCE INVENTORY AND DESCRIPTION

Table 1 of Operating Permit Number 237TVP01 contains information on the sources regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

The Operating Permit Number 237TVP01 contains emission information as provided in the Title V Operating Permit Application and amendments. A summary of the potential to emit (PTE)[7] and assessable PTE as indicated in the application from Fort Richardson is provided in the table below.

Table A - Emissions Summary, in Tons Per Year (TPY)

Pollutant	NO_X	CO	PM-10	SO_2	VOC	HAPs	Total
PTE	1183.2	1059.3	100.4	0.2	60	12.6	2415.5
Assessable PTE	310.3	92.7	11.1	0	0	0	414.1

[7] *Potential to Emit or PTE* means the maximum quantity of a release of an air contaminant, considering a facility's physical or operational design, based on continual operation of all sources within the facility for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the facility's sources or the facility to emit an air contaminant, including limitations such as restrictions on hours or rates of operation and type or amount of material combusted, stored, or processed as defined in AS 46.14.990(21), effective 1/18/97.

The assessable PTE listed under Condition 1.1 is the sum of the emissions of each individual regulated air contaminant for which the facility has the potential to emit quantities greater than 10 TPY. The PTE's reflect emission rates agreed upon in the proposed construction permit. The emissions listed in Table A are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the facility.

For criteria pollutants, emissions are as provided in the application.

The Department calculated HAP emissions using GRI-HAPCalc®3.01.

BASIS FOR REQUIRING AN OPERATING PERMIT

Section 1 of Operating Permit Number 237TVP01 lists the regulatory classifications of the Fort Richardson facility.

This facility is classified as a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300, because it has the potential to emit 250 TPY or more of a regulated air contaminant in an area designated attainment or unclassified for that air contaminant under 18 AAC 50.15 and defined in 18 AAC 50.300(c)(1), and 18 AAC 50.300(c)(2) because the facility has the potential to emit 100 TPY or more of a regulated air contaminant in an area designated attainment or unclassifiable for that air contaminant under 18 AAC 50.015 and the facility is a (A) fossil-fuel-fired steam electric plant of more than 250 million Btu per hour heat input; and (V) fossil-fuel boiler or a combination of boilers totaling more than 250 million Btu per hour heat input.

This facility requires an operating permit under 18 AAC 50.325(b)(1) because it emits $\geq$100 TPY of a regulated air contaminant.

This facility is not a major source for hazardous air pollutants (HAPs) because it does not have the potential to emit 10 TPY of a single HAP or 25 TPY of a combination of HAPs.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to Fort Richardson, the state regulations require a description of:

⇒ Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under18 AAC 50.335(e)(4)(C);

⇒ Each source subject to a standard adopted by reference in 18 AAC 50.040 under 18 AAC 50.335(e)(2); and

⇒ Sources subject to requirements in an existing Department permit 18 AAC 50.335(e)(5).

The emission sources at Fort Richardson classified as "regulated sources" according to the above Department regulations are listed in Operating Permit Number 237TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent permit issued for this facility is Permit-to-Operate Number 9421-AA006. This permit-to-operate included all construction authorizations issued through January 30, 1991, since it was issued before January 18, 1997. All facility-specific requirements established in this previous permit are included in the new operating permit as described in Table B.

Construction Permits

Construction Permit Number 237CP03 was issued to this facility on October 6, 2003 and rescinded Construction Permit Number237CP02. The facility-specific requirements established in Construction Permit Number 237CP03 have specific monitoring, recordkeeping, or reporting Conditions carried over into this permit in Section 5.

Title V Operating Permit Application History

The owner or operator submitted an application on December 7, 1997.

The owner or operator amended this application in August 1998. This included administrative changes, updates to information provided on insignificant sources and removal of air emission sources under the operational control of the Army National Guard and the Army and Air Force Exchange Service who are tenant organizations on Fort Richardson.

The owner or operator amended this application for the second time on March 26, 2003. Some equipment had been decommissioned and those sources are no longer operational. This revised permit application only includes air emission units that are currently in operation at the installation.

COMPLIANCE HISTORY

The facility has operated at its current location since 1947. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its operating permit with the exception of 2 notice of violations issued in 2000. The first NOV identified noncompliance associated with the operation of the coal-fired boilers at the Central Heat and Power Plant and deviation associated with some operating parameters related to the deactivation furnace. The second NOV identified multiple instances of noncompliance with the National Perchloroehylene Air Emission Standard for Dry Cleaning Facilities associated with the Fort Richardson Dry Cleaning Facility. Instances of noncompliance associated with the deactivation furnace and the dry cleaning plant were corrected in January 2000. The coal-fired boilers have not operated since May 1999 and have since been decommissioned. All instances of noncompliance with these units were resolved due to the decommissioning. A compliance plan based on Owner Requested Limits for Source ID(s)n EU13 through EU16 is included in Air Quality Operating Permit 237TVP01.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

State of Alaska regulations in 18 AAC 50.350(d)(1)(D) require that an operating permit include each facility-specific requirement established in a prior construction permit. Table B below lists the Air Quality Control Permit Number 9421-AA006 Conditions that now become part of Air Quality Operating Permit Number 237TVP01. Table C below list the Air Quality Construction Permit Number 237CP03 conditions now in Air Quality Operating Permit Number 237TVP01.

Table B – Permit Condition Comparison Permit Number 9421AA006 & Number 237TVP01

Operating Permit -No. 9421-AA006	Title V Operating Permit No. 237TVP01 Condition(s)	Description of Requirement	How Condition Was Revised
A.1	84	Comply with Federal and State emission standard and increments 18 AAC 50.020.	Not revised.
A.2	60	Comply with most stringent emission standards set in 18 AAC 50.040, 18 AAC 50.110 and Exhibit B of 9421-AA006.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
B.3	55	Install, maintain, and operate IAW manufacturer's equipment to control air emissions during operations periods.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
B.4	NA	Operate the four coal-fired boilers not > 90,000 lbs. of steam per hour per boiler.	Deleted Condition due to decommissioning of coal-fired boilers.
B.5	NA	Operate the four coal-fired boilers for not more than a cumulative total of 1260 hours per year.	Deleted Condition due to decommissioning of coal-fired boilers.
B.6	11	Limit the 5 generators in Bldg. S772 to 240 hrs. each	Not revised.
B.7	Section 5, Condition 5	Sulfur content in coal should be < 0.26 percent by weight and 0.5 percent by weight for all other fuel sources.	Deleted part of Condition due applicable to the coal-fired boilers (coal sulfur content). Sulfur content for other fuels is still applicable.
B.8	57	Control of fugitive dust from material piles, roadways, and coal and ash handling and transport systems.	The control of fugitive dust is still applicable. Revised Condition to eliminate control of coal and ash due to decommissioning of the

Operating Permit -No. 9421-AA006	Title V Operating Permit No. 237TVP01 Condition(s)	Description of Requirement	How Condition Was Revised
			coal-fired boilers.
C.9	NA	Perform source emission tests on two of the coal-fired boilers to obtain the concentrations and mass emission rates of SO2, NOx, CO, and PM.	Deleted Condition. Tests are not applicable due to decommissioning of the coal-fired boilers.
C.10	NA	Perform source emission tests on the deactivation furnace to obtain the concentrations and mass emission rates of SO2, NOx, CO, PM, lead, beryllium, and mercury.	Deleted Condition. Tests are not applicable due to decommissioning of the deactivation furnace.
C.11	64 through 65	Conduct source tests at maximum rate of the facility or maximum anticipated operating rate, unless otherwise specified by the Department.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
C.12	69	Submit a complete plan for conducting the source test to the South-Central Regional Office of the Department within 60 days of receiving a request and at least 30 days prior to scheduled date of test.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
C.13	70	Give the South Central Regional Office notice within 10 days prior to the series of tests under permit No. 9421-AA006.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
C.14	NA	Collect and report parameters pertaining to control devices for the deactivation furnace and the coal-fired boilers.	Condition deleted due to decommissioning of the deactivation furnace and the coal-fired boilers.
C.15	NA	Submit the results of the test in Condition C.14	Condition deleted due to decommissioning of the deactivation furnace.
C.16	63	Source tests may be	Revised per 5/3/02

Operating Permit -No. 9421-AA006	Title V Operating Permit No. 237TVP01 Condition(s)	Description of Requirement	How Condition Was Revised
		required, at any time, if deterioration is suspected or necessary by the Department.	version of 18 AAC 50 for standard conditions.
D.17	77	Notify the Department on any equipment or process failures within 24 hours of incident.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
D.18	77.1	Provide written report within 5 days of equipment or process failure.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
D.19	77.1	Any continuous monitor is malfunctioning for 3 or more days must report to the Department via telephone or facsimile.	Not revised.
D.20	77.4	Submit all required oral, facsimile, and written reports to the Department.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
E.21	87	Provide access to the facility, at any reasonable time, to the Department.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
F.22	79	Submit 2 copies of the Facility Operating Report to the Department.	Not revised.
F.23	76	Maintain records in an active file for one year and have accessibility to the Department. Obtain accessibility for not less than 3 years.	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
F.24	NA	Notify the Department in writing whenever plans to expand, modify, or other changes in the facility result in an increase in emissions.	Removed. State-only reporting for modifications now required in a construction permit.
F.25	NA	Maintain proper operation instructions for each source in Exhibit A.	Operation instructions pertaining to the deactivation furnace, the coal-fired boilers, and the incinerators are not applicable due to decommissioning.

Operating Permit -No. 9421-AA006	Title V Operating Permit No. 237TVP01 Condition(s)	Description of Requirement	How Condition Was Revised
F.26	NA	Clearly display a copy of permit # 9421-AA006 and keep copy of 18 AAC 50 at the facility location.	Permit No. 237TVP01 will supersede Permit No. 9421-AA006, therefore, this Condition is not applicable.
G.27	33	Install, operate, and maintain emission and process monitors.	The 5 diesel generators in Bldg. S772 have hour meters installed on the equipment. Not applicable to the deactivation furnace and the coal-fired boilers due to decommissioning.
G.28	NA	Operate coal-fired boilers based on a one hour average IAW continuous emission monitor system for Condition G.27.	Not applicable due to decommissioning of the coal-fired boilers.
G.29	NA	Test opacity, CO and oxygen for compliance with the applicable procedures set forth in 40 CFR 60.	Not applicable due to decommissioning of the coal-fired boilers.
G.30	NA	Opacity monitor shall be tested for conformance with manufacturer's specifications and submit Facility Operating Reports to the Department when the coal-fired boilers are operated.	Not applicable due to decommissioning of the coal-fired boilers.
G.31	NA	Continuously monitor the flue gas opacity, CO, and oxygen concentration from each exhaust stack for coal-fired boilers.	Not applicable due to decommissioning of the coal-fired boilers.
G.32	NA	Monitor the capacity from the rotary exhausters installed on the coal-fired boilers ash handling system.	Not applicable due to decommissioning of the coal-fired boilers.
H.33	NA	Submit a demonstration (by October 1995) that the facility does not cause	Condition deleted. Requirement was met.

Operating Permit -No. 9421-AA006	Title V Operating Permit No. 237TVP01 Condition(s)	Description of Requirement	How Condition Was Revised
		dangerous emissions from any source that is harmful to human health or the environment.	
H.34	NA	Submit to the Department an inventory of all storage tanks (by January 30, 1996).	Condition deleted. Requirement was met.
H.35	NA	Submit to the Department information in the shaded cells of Exhibit H.	Condition deleted. Requirement was met.

State of Alaska regulations in 18 AAC 50.350(d)(1)(D) require that an operating permit include each facility-specific requirement established in a prior construction permit. Table B below list the Air Quality Construction Permit Number 237CP01 Conditions now in Air Quality Title V Operating Permit Number 237TVP01.

Table C - Permit Condition Comparison between Construction Permit Number 237CP03 and Title V Operating Permit Number 237TVP01

Construction Permit -No. 237CP03	Title V Operating Permit -No. 237TVP01	Description of Requirement	How Condition Was Revised
1	NA	Permit continuity	Deleted. Title V permit supercedes condition.
2	NA	Permit continuity	Deleted. Title V permit supercedes condition.
3	NA	Permit continuity	Deleted. Title V permit supercedes condition.
4	3	Visible Emissions	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
5	4	Particulate Matter	Revised per 5/3/02 version of 18 AAC 50 for standard conditions.
6	7 & 8	Fuel sulfur limits to protect ambient air quality	Revised for similarity of monitoring per 5/03/02 version of 18 AAC 50 for standard conditions-fuel sulfur.
7	NA	Authorization to install new equipment.	Deleted. Applies to 237CP03 only.

Construction Permit -No. 237CP03	Title V Operating Permit -No. 237TVP01	Description of Requirement	How Condition Was Revised
8	6	Fuel consumption limit	Revised, added Table 3
9	7	Limit on natural gas fuel sulfur.	Not revised.
10	NA	Special requirements for installed sources	Deleted. Coal boilers no longer operational.
11	6.2	Special requirements for installed sources	Not revised
12	11.1	Special requirements for installed sources	Not revised
13	11.1	Special requirements for installed and operating sources	Not revised
14	9	Existing sources recordkeeping and reporting requirements.	Not revised
15	NA	Coal boilers- notify DEC when sources not operational	Removed-coal boilers no longer operational.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. **237TVP01**.

Conditions 1 - 2, Emission Fees

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air contaminant authorized by the permit (AS 46.14.250(h)(1)(A)). Air contaminant means any regulated air contaminant and any hazardous air contaminant. Therefore, assessable emissions under AS 46.14.250(h)(1)(A) means the **potential** to emit any air contaminant identified in the permit, including those not specifically limited by the permit. For example, hydrogen chloride (HCl) emissions from an incinerator are assessable emissions because they are a hazardous air contaminant, even if there is currently no emission limit on HCl for that class of incinerator.

The conditions also describe how the Permittee may calculate **actual** annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air contaminant. Therefore, fees based on actual emissions must also be paid on any contaminant emitted whether or not the permit contains any limitation of that contaminant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match. The Permittee will normally pay for actual emissions - just with a one-year time lag.

Projected actual emissions may differ from the previous year's actual emissions if there is a change at the facility, such as changes in equipment or an emission rate from existing equipment.

If the Permittee does not choose to annually calculate assessable emissions, emissions fees will be based on "potential to emit" (PTE).

The PTE set forth in the condition is based on liquid fuel with a sulfur content of 0.5 percent by weight or fuel gas with a sulfur content of 4,335 ppm H_2S by volume. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the Permittee should reflect the actual sulfur content. The change in these values may result in SO_2 emissions that could trigger PSD.

Condition 3 and Section 6, Visible Emissions Standard

Applicability: This regulation applies to operation of all fuel-burning equipment in Alaska. Source ID(s) EU01 through EU06 and EU13 through EU23 are fuel-burning equipment.

Factual Basis: Condition 3 requires the Permittee to comply with the federal and the state visible emission standards applicable to fuel-burning equipment and incinerators. The Permittee shall not cause or allow the equipment to violate these standards.

This condition has recently been adopted into regulation as a standard condition. MR&R requirements are listed in Section 6 of the permit.

Gas Fired:

Monitoring – The monitoring of gas fired sources for visible emissions is waived, i.e. no source testing will be required. The Department has found that natural gas fired equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Section 6. Corrective actions such as maintenance procedures

and either more frequent or less frequent testing may be required depending on the results of the observations.

Recordkeeping - The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Dual Fuel-Fired Sources:

For Source ID(s) EU01, as long as they operate only on gas, monitoring consists of an annual certification that only gaseous fuels were used in the equipment. When any of these sources operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring as detailed in condition 27 is required for that source in accordance with recently issued Department Guidance AWQ 02-014. When any of these sources operates on a backup liquid fuel for less than 400 hours in a calendar year, monitoring for that source consists of an annual certification of compliance with the opacity standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

Insignificant Sources:

For Source ID(s) EU02 through EU06 and EU13 through EU20 no visible emissions monitoring is required because these sources are insignificant sources based on actual emissions and have permit condition(s) 11 that limit either their hours of operation or fuel consumption. As long as the sources do not exceed these limits they are insignificant by emissions as specified in 18 AAC 50.335(r) and no monitoring is required in accordance with recently issued Department Guidance AWQ 02-014. The Permittee must annually certify compliance under condition 80 with the opacity standard.

Condition 4 and Section 6, Particulate Matter (PM) Standard

Applicability: The PM standard applies to operation of all fuel burning equipment in Alaska. Source ID(s) EU01 through EU06 and EU13 through EU23 are fuel-burning equipment. The SIP standard for PM applies to all fuel-burning equipment because it is contained in the federally approved SIP dated October 1983.

Factual Basis: Condition 4 requires the Permittee to comply with the state PM (also called grain loading) standard applicable to fuel-burning equipment. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

MR&R requirements are listed in Section 6 of the permit.

Gas Fired:

Monitoring – The monitoring of gas fired sources for particulate matter is waived, i.e. no source testing will be required. The Department has found that natural gas fired equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Dual Fuel-Fired Sources:

For Source ID(s) EU01, as long as they operate only on gas, monitoring consists of an annual certification that only gaseous fuels were used in the equipment. When any of these sources operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring as detailed in conditions 30 is required for that source in accordance with recently issued Department Guidance AWQ 02-014. When any of these sources operates on a backup liquid fuel for less than 400 hours in a calendar year, monitoring for that source consists of an annual certification of compliance with the particulate matter standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

Insignificant Sources:

For Source ID(s) EU02 through EU06 and EU13 through EU20 if they remain in compliance with Condition 11, no monitoring is required because these sources are insignificant sources based on actual emissions. Source ID(s) EU02 through EU06 and EU13 through EU20 must not exceed operational hour limit(s) as required by Condition(s) 11. As long as they operate within these limits they are considered insignificant sources by emissions as specified in 18 AAC 50.335(r) and no monitoring is required in accordance with recently issued Department Guidance AWQ 02-014. The Permittee must annually certify compliance under condition 80 with the particulate matter standard.

Condition 5, Sulfur Compound Emissions

Applicability: The sulfur emission standard applies to operation of all fuel-burning equipment in the State of Alaska. Source ID(s) EU01 through EU06 and EU13 through EU23 are fuel-burning equipment. The SIP standard for sulfur dioxide applies because it is contained in the federally approved SIP dated October 1983.

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard. For fuels with a sulfur content higher than 0.75 percent, the condition requires the Permittee to use Section 16 to calculate the sulfur-dioxide concentration using the equations to show that the standard is not exceeded.

Fuel sulfur testing will verify compliance.

Fuel gas sulfur is measured as hydrogen sulfide (H_2S) concentration in ppm by volume (ppmv). Calculations[8] show that fuel gas containing no more than 4000 ppm H_2S will always comply with this emission standard. This is true for all fuel gases, even with no excess air.

Equations to calculate the exhaust gas SO_2 concentrations resulting from the combustion of fuel gas were not included in this permit. Fuel gas with an H_2S concentration of even 10 percent of 4000 ppm is currently not available in Alaska and is not projected to be available during the life of this permit.

Recordkeeping - For Diesel fuel the Permittee is required to record the fuel sulfur content or fuel grade of each shipment and all material balance calculations, and for fuel gas, the H_2S concentration of the fuel gas.

Reporting – The Permittee is required to report as State excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standards in this condition. The Permittee is required to include the material balance calculations for fuel oil in the excess emissions report.

The Permittee is required to include copies of the records mentioned in the previous paragraph with the facility operating report.

Conditions 6 -11, Construction Permit Conditions

Legal Basis: These applicable conditions are carried over from the existing Construction Permit Number 237CP03 under 18 AAC 50.350(d)(1)(D).

Factual Basis: These conditions contain requirement to monitor and record operating parameters to provide an adequate basis for emission estimates and ambient impacts.

Conditions 12 - 13, NSPS Subpart Kb Requirements (Recordkeeping Only)

Applicability: NSPS Subpart Kb applies to sources that were built or modified after July 23, 1984. Source ID(s) EU08 was built in 1995, has a storage capacities of 20,000 gallons and stores volatile organic liquids (VOLs) with maximum true vapor pressure of no more than 3.5kPa. Since the tank has either

(1) storage capacities $\geq$ 40 m^3 (10,567gallons) but < 75 m^3 (20,0000 gallons);

(2) storage capacities $\geq$ 75 m^3 but < 151 m^3 (between 20,000 to 40,000 gallons) storing a VOL with a maximum true vapor pressure of < 15.0 kPa (2.2 psia); or

(3) storage capacities $\geq$ 151 m^3 storing a VOL with a maximum true vapor pressure of < 3.5 kPa (0.5 psia),

it is subject to **only** the recordkeeping requirements in Subpart Kb (**40 C.F.R. 60.116b(a) & (b)**).

Factual Basis: This condition incorporates Subpart Kb recordkeeping requirements. Because the condition is a permanent recordkeeping condition, no monitoring or reporting is required to ensure compliance with these federal requirements.

[8] See ADEC Air Permits Web Site at http://www.state.ak.us/dec/dawq/aqm/newpermit.htm, under "Stoichiometric Mass Balance Calculations of Exhaust Gas SO2 Concentration."

Condition 14, Municipal Solid Waste Landfill Requirements

Applicability: These Condition incorporate the applicable parts of 40 CFR 60, Subpart Cc. Source ID EU09 is subject to this subpart.

Factual Basis: The facility has a Municipal Solid Waste (MSW) Landfill that is subject to MSW Landfill NESHAP and is required to submit a one time capacity report. This obligation has been met.

Conditions 15 - 24, Sources Subject to NESHAPS – Subpart A and Subpart M Asbestos

Applicability: These Conditions incorporate applicable requirements 40 CFR 61, Subpart A and the subsections of Subpart M that apply to the facility.

Factual Basis*:* Monitoring and recordkeeping requirements for these Conditions are described in the NESHAP Subpart M and have been referenced here. No additional monitoring outside of the Subpart M requirements is necessary to ensure compliance with the NESHAP standard.

Conditions 25 - 26, NESHAPS 40 CFR 63, Subpart A and Subpart M-Dry Cleaning Facilities

Applicability: These Conditions incorporate the requirements of 40 CFR 63, Subpart M.

Factual Basis: The facility operates a dry cleaning plant that is subject to National Perchloroethylene NESHAP.

Conditions 27 - 33 Section 6, Visible Emissions and PM Monitoring Plan

Applicability: Applies because these Conditions detail the monitoring, recordkeeping, and reporting required in Conditions 3 and 4.

Factual Basis: Each permit term and Condition must include MR&R requirements showing verifiable compliance with each permit term and Condition. The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter. The correlation between particulate matter and visible emissions that is the basis for this monitoring procedure is discussed under Conditions 3 and 4.

These Conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired sources. Equipment types covered by these Conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Monitoring frequencies for hydrocarbon fuels, both liquid and gaseous, are detailed in these Conditions. The monitoring intervals for gaseous fuels are less frequent than for liquid fuels in recognition of the reduced propensity of gaseous fuels to produce particulate matter as a result of combustion. This reduced level of monitoring for individual facilities in conjunction with the very large number of gas fired sources in Alaska should provide the

Department with sufficient data to evaluate the compliance history of these sources as a category.

Reasonable action thresholds are established in these Conditions that require the Permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Condition 34, Facility-Wide Requirements, Source Aggregation

Applicability: [18 AAC 50.990(37), 1/18/97 and 18 AAC 50.910, 1/18/97]

Factual Basis: The aggregated potential emissions are the potential emissions from all sources installed after August 8, 1980, at the facility. The aggregation is for the purpose of determining applicability with the modification requirements of 18 AAC 50.300(h)(3).

Condition 35, NESHAPS Applicability Determinations

Applicability: These sources constitute the facility for PSD applicability.

Factual Basis: The Permittee has conducted an analysis of the facility and determined that it is not a major HAPs facility based on emissions. This condition requires the Permittee to keep and make available to the Department copies of the major facility determination.

Condition 36 - 50, Protection of Stratospheric Ozone

Applicability: These prohibitions apply to all facilities that use ozone depleting substances for fire extinguishing and explosion inertion. Fort Richardson uses ozone depleting substances and is therefore subject to the federal regulations contained in 40 CFR 82.

Factual Basis: These Conditions incorporate applicable 40 CFR 82 requirements. The Permittee may not cause or allow violations of these prohibitions.

Conditions 51- 53, Insignificant Sources

Applicability: These general emission standards apply to all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual Basis: The conditions re-iterate the general standards and require compliance for insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

Condition 3.1 requires certification that the sources did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. For Source ID(s) EU02 through EU06 and EU13 and through EU20, as long as they do not exceed the limits of their hours of operation as stated in condition 11, they are considered insignificant sources and no monitoring is required in accordance with recently issued Department Guidance AWQ 02-014 #3 for standby sources.

State air quality regulations adopted effective May 3, 2002 allow for an average six minute opacity observation. The existing regulation, limiting opacity to no more than 20% for more than 3 minutes in any one hour, is included because EPA Region X has not formally approved the changed opacity regulation as part of Alaska's State Implementation Plan (SIP).

Condition 54, Compliance Plan

Applicability: State regulations require that a Title V operation permit contains a compliance plan for permit conditions for which the facility is currently in violation.

Factual Basis: Fort Richardson is a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300(c)(1) because it has the potential to emit more than 250 TPY of a regulated air contaminant in an area classified as attainment or unclassifiable. Fort Richardson has never gone through a PSD review.

However on the dates listed in Table 1, Source ID(s) EU02 through EU06 and EU13 through EU20 were installed triggering a PSD review based on a projected potential emissions. Therefore Fort Richardson is in violation of 18 AAC 50.300(h)(2). Conditions 54.1 and 54.2 are applicable immediately upon issue of this permit.

Condition 55, Good Air Pollution Control Practice

Applicability: Applies to all fuel fired sources listed in Table 1.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all sources.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 56, Dilution

Applicability: This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 57, Reasonable Precautions to Prevent Fugitive Dust

Applicability: Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the facility.

Factual Basis: The underlying regulation, 18 AAC 50.045(d), requires the Permittee to take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

Condition 58, Stack Injection

Applicability: Stack injection requirements apply to the facility because the facility contains a stack or source constructed or modified after November 1, 1982.

Factual Basis: The condition prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

Condition 59, Open Burning

Applicability: The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the facility.

Factual Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the facility.

No specific monitoring is required for this condition. Condition 59.1f requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Additional monitoring is achieved through condition 60, which requires a record of complaints.

Condition 60, Air Pollution Prohibited

Applicability: Air Pollution Prohibited requirements apply to the facility because the facility will have emissions.

Factual Basis: The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the Department.

The Department will determine whether the necessary actions were taken. No corrective actions are necessary if the complaint is frivolous or there is not a violation of 18 AAC 50.110, however this condition is intended to prevent the Permittee from prejudging that complaints are invalid.

Condition 61, Technology-Based Emission Standard

Applicability: Technology Based Emission Standard requirements apply to the facility because the facility contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with condition 77. Excess emission reporting under condition 77 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 77.

Condition 62, Permit Renewal

Applicability: Applies if the Permittee intends to renew the permit.

Factual Basis: The Permittee is required to submit an application for permit renewal by the specific dates applicable to Fort Richardson as listed in this condition. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Condition 63, Requested Source Tests

Applicability: Applies because this is a standard condition to be included in all permits.

Factual Basis: The Permittee is required to conduct source tests as requested by the Department. Monitoring consists of conducting the requested source test.

Conditions 64 - 66, Operating Conditions, Reference Test Methods, Excess Air Requirements

Applicability: Apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: The Permittee is required to conduct source test as set out in conditions 64 through 66. These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with conditions 64 through 66 consist of the test reports required by condition 71.

Condition 67, Test Exemption

Applicability: Applies when the source exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), 5/03/02, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 68 - 71, Test Deadline Extension, Test Plans, Notifications and Reports

Applicability: Apply because the Permittee is required to conduct source test by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 72, Particulate Matter (PM) Calculations

Applicability: Applies when the Permittee tests for compliance with the PM standard.

Factual Basis: The condition incorporates a regulatory requirement for PM source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 73, Certification

Applicability: This is a standard condition to be included in all permits. Applies because every permit requires the Permittee to submit reports.

Factual Basis: This condition requires the Permittee to certify all reports submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be **certified** with the facility report, even though it must still be **submitted** more frequently than the facility operating report. This condition supplements the reporting requirements of this permit.

Condition 74, Submittals

Applicability: Applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition requires the Permittee to send submittals to the address specified in this condition. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of this permit.

Condition 75, Information Requests

Applicability: Applies to all Permittees, and incorporates a standard condition.

Factual Basis: This condition incorporates a standard condition in regulation, which requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 76, Recordkeeping Requirements

Applicability: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement.

Condition 77, Excess Emission and Permit Deviation Reports

Applicability: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The reports themselves and the other monitoring records required under this permit provide monitoring of whether the Permittee has complied with the condition.

Condition 78, NSPS and NESHAP Reports

Applicability: Applies to facilities subject to NSPS and NESHAP federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61 and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 79, Operating Reports

Applicability: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

Condition 80, Annual Compliance Certification

Applicability: Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. The reports themselves provide monitoring for compliance with this condition.

Conditions 81 - 87, Standard Conditions

Applicability: Applies because these are standard conditions to be included in all permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 88, Permit Shield

Applicability Applies because the Permittee has requested a shield for the applicable requirements listed in Table 4 and Table 5 under this condition.

Factual Basis: Table 4 and Table 5 of Operating Permit No. 237TVP01 show the permit shields that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, construction permits and inspection reports.